


Datasheet - AZM 170-02ZRK-2197 24 VAC/DC

Solenoid interlock / AZM 170



- Thermoplastic enclosure
- Double-insulated 
- Compact design
- 90 mm x 84 mm x 30 mm
- 1 Cable entry M 20 x 1.5
- Interlock with protection against incorrect locking.
- Long life
- High holding force
- IDC method of termination
- Manual release from side

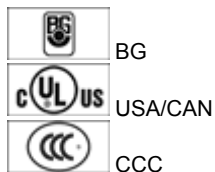
(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description	AZM 170-02ZRK-2197 24 VAC/DC
Article number	101140818
EAN Code	4030661120065
eCl@ss	27-27-26-03

Approval

Approval



Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{cp} \times 3600 \text{ s/h}}{t_{cycle}}$

Global Properties

Permanent light	AZM 170
Standards	EN 60947-5-1, BG-GS-ET-19

Compliance with the Directives (Y/N) 

Number of actuating directions

Active principle

Duty cycle ED

Materials

- Material of the housings
- Material of the contacts

Housing coating

Weight

Yes

2

electromechanical

Magnet 100 %

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver

None

285

Mechanical data

Design of electrical connection

Cable section

- Min. Cable section
- Max. Cable section

Mechanical life

Emergency unlocking device (Y/N)

- bottom

Manual release (Y/N)

- right

Emergency release (Y/N)

Latching force

Positive break force

positive break travel

Clamping force F

Max. Actuating speed

IDC method of termination

1 x 0,75

1 x 1.0, flexible

> 1.000.000 operations

No

Yes

No

30

17

11 mm

1000 N

2 m/s

Ambient conditions

Ambient temperature

- Min. environmental temperature
- Max. environmental temperature

Protection class

-25 °C

+60 °C

IP67 to IEC/EN 60529

Electrical data

Design of control element

notice

Switching principle

Number of auxiliary contacts

Number of safety contacts

Power to unlock

Power to lock

Rated control voltage U_s

Power consumption

Rated impulse withstand voltage U_{imp}

Rated insulation voltage U_i

Thermal test current I_{the}

Utilisation category

Max. fuse rating

Opener (NC)

change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges

Creep circuit element

0

2

Yes

No

24 VAC/DC

max. 10 W

4 kV

250 V

10 A

AC-15: 230 V / 4 A, DC-13: 24 V / 4 A

6 A gG D-fuse

ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Miscellaneous data

Applications	<div> sliding safety guard, </div> <div> removable guard, </div> <div> hinged safety guard </div>
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Dimensions

Dimensions of the sensor	
- Width of sensor	90
- Height of sensor	84
- Length of sensor	30 mm

notice

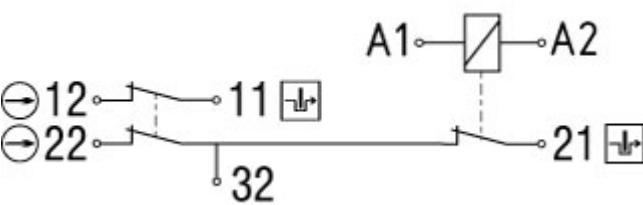
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

Individual coding available on request


Manual release from side


- For manual release using M5 triangular key, available as accessory
- Additional manual release on side


Diagram





Note Diagram

 positive break NC contact

 active

 no active


 Normally-open contact


 Normally-closed contact




Switch travel diagram



Notes Switch travel diagram

 Contact closed

 Contact open

-  Setting range
-  Break point
-  Positive opening sequence/- angle
- VS** adjustable range of NO contact
- VÖ** adjustable range of NC contact
- N** after travel

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.
 Order example: AZM 170-02ZRK-2197 24 VAC/DC-**1637**

.... 1637	0,3 µm gold-plated contacts
... ST-2431	connector M12 , Individual solenoid monitoring

Ordering code

AZM 170(1)-(2)Z(3)K(4)-(5)-(6)-(7)	
(1)	
without	IDC method of termination
SK	Screw connection
(2)	
11	1 Normally open contact (NO) / 1 Opener (NC)
02	2 Opener (NC)
12/0.0	1 Normally open contact (NO), 2 Opener (NC) / -
(3)	
without	Latching force 5 N
R	Latching force 30 N
I	Individual coding
(4)	
without	Power to unlock
A	Power to lock
(5)	
without	cable gland
ST	Connector M12 x 1
ST-2431	Connector M12 x 1, Individual solenoid monitoring
(6)	
24VAC/DC	U _s 24 VAC/DC
110VAC	U _s 110 VAC
230VAC	U _s 230 VAC
(7)	
without	Manual release
2197	Manual release from side (Power to unlock)
1637	gold-plated contacts
	AZM 170ST and AZM 170SK
	AZM 170ST-(1)Z(2)K(3)-(4)-(5)-024
	AZM 170SK-(1)Z(2)K(3)-(4)-(5)-024
(1)	
11/11	1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact

	(NO), 1 Opener (NC)
11/02	1 Normally open contact (NO), 1 Opener (NC) / 2 Opener (NC)
12/00	1 Normally open contact (NO), 2 Opener (NC) / -
12/11	1 Normally open contact (NO), 2 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
12/02	1 Normally open contact (NO), 2 Opener (NC) / 2 Opener (NC)
02/01	2 Opener (NC), - / 1 Opener (NC), -
02/10	2 Opener (NC), - / 1 Normally open contact (NO), -
(2)	
<i>without</i>	Latching force 5 N
R	Latching force 30 N
(3)	
<i>without</i>	Power to unlock
A	Power to lock
(4)	
1637	gold-plated contacts
(5)	
2197	Manual release for Power to unlock

Documents

Operating instructions and Declaration of conformity (fr) 701 kB, 15.02.2018

Code: mrl_azm170_fr

Operating instructions and Declaration of conformity (de) 672 kB, 20.05.2019

Code: mrl_azm170_de

Operating instructions and Declaration of conformity (it) 718 kB, 06.06.2019

Code: mrl_azm170_it

Operating instructions and Declaration of conformity (cn) 655 kB, 08.05.2017

Code: mrl_azm170_cn

Operating instructions and Declaration of conformity (nl) 702 kB, 12.07.2018

Code: mrl_azm170_nl

Operating instructions and Declaration of conformity (en) 702 kB, 20.05.2019

Code: mrl_azm170_en

Operating instructions and Declaration of conformity (jp) 843 kB, 23.08.2016

Code: mrl_azm170_jp

Operating instructions and Declaration of conformity (pl) 736 kB, 14.06.2018

Code: mrl_azm170_pl

Operating instructions and Declaration of conformity (da) 582 kB, 07.08.2012

Code: mrl_azm170_da

Operating instructions and Declaration of conformity (es) 719 kB, 31.05.2019

Code: mrl_azm170_es

BG-test certificate (en) 260 kB, 09.12.2015

Code: z_m17p02

BG-test certificate (de) 257 kB, 09.12.2015

Code: z_m17p01

CCC certification (en) 5 MB, 26.10.2018

Code: q_371p02

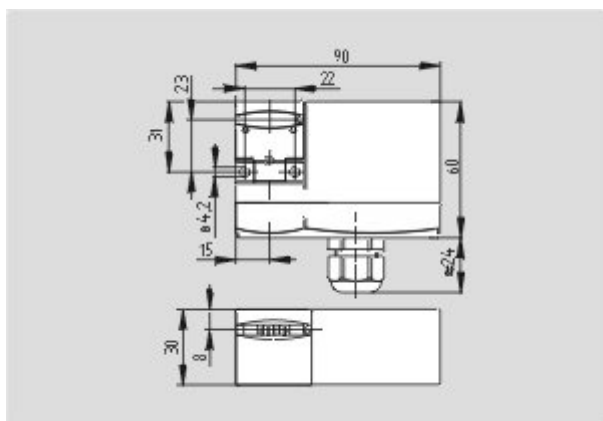
CCC certification (cn) 5 MB, 26.10.2018

Code: q_371p03

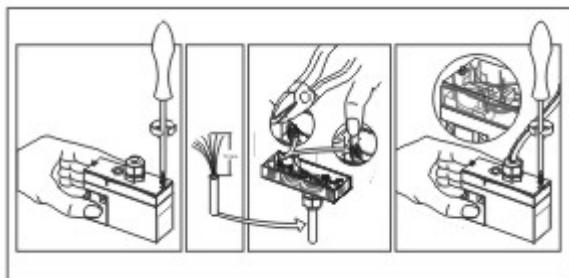
EAC certification (ru) 809 kB, 05.10.2015

Code: q_6040p17_ru

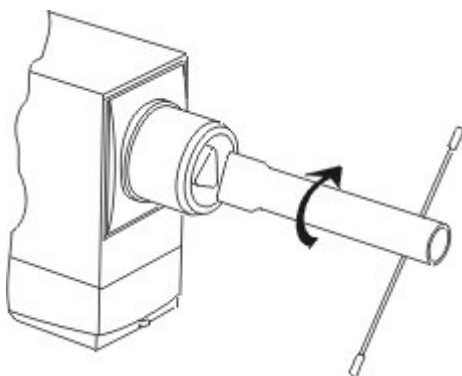
Images



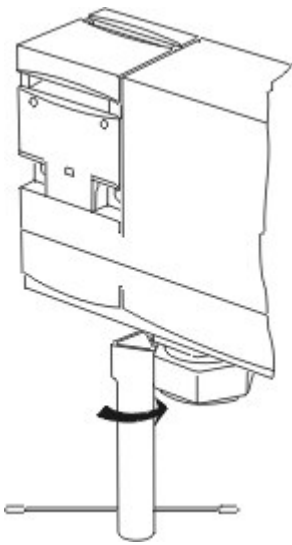
Dimensional drawing (basic component)



Assembly example



Detail photo



Detail photo

System components

Actuator



- 101122893 - AZ 17/170-B1**
- Particularly suitable for sliding doors



- 101137406 - AZ 17/170-B1-2245**
- Particularly suitable for sliding doors
 - Damps vibration on guard device



- 101122895 - AZ 17/170-B5**
- Particularly suitable for sliding doors



- 101139788 - AZ 17/170-B11**
- Particularly suitable for sliding doors



- 101139789 - AZ 17/170-B15**
- Particularly suitable for sliding doors



101123391 - AZM 170-B6

- Particularly suitable for hinged guards
- For very small actuating radii
- The direction of actuation can be selected by applicable insertion of the insert

Accessories



101208493 - AZM 170-B CENTERING GUIDE

- for AZ 17 and AZM 170



101100887 - TRIANGULAR KEY TK-M5

- For manual release using M5 triangular key, available as accessory
- For maintenance, installation, etc.

Connector



A-K4M12

- Pre-wired cable
- 4-pole



S-K4M12

- Connector without cable
- 4-pole